

Amendments to the Claims

Listing of Claims:

1. (currently amended) A method for reducing phase mismatch in quadrature signals in
5 an RF receiver, wherein the quadrature signals comprises a first signal and a second
signal that are at about quadrature phase angles, the method comprises:
modifying the first signal by subtracting a portion of the first signal from the first
signal; and
modifying the second signal by the portion of the first signal so that a phase
10 difference between the modified second signal and the first signal becomes
substantially close to 90 degrees.
2. (previously presented) The method of claim 1 further comprising:
compensating the portion of the first signal to the second signal to reduce phase
15 mismatch in the pair of quadrature signals.
3. (cancelled)
4. (currently amended) A method used in an RF receiver for reducing an image cross
20 talk, the RF receiver comprising:
a first mixer and a second mixer for receiving RF signals and respectively generating
a first signal and a second signal that are at about quadrature phase angles; and
a ~~programmable phase calibration device~~ calibration module coupled to the pair of
mixers for reducing phase mismatch in the pair of quadrature signals when the
25 phase mismatch causes the image cross talk;
the method comprising:
utilizing the pair of mixers to process the RF signal and to output the pair of

quadrature signals; and

utilizing the ~~programmable phase calibration device~~ calibration module to reduce the phase mismatch in the pair of quadrature signals through modifying the first signal by subtracting a portion of the first signal from the first signal, and
5 modifying the second signal by the portion of the first signal, wherein two ports of the ~~programmable phase calibration device~~ calibration module are respectively connected to two output ports of the pair of mixers.

5. (currently amended) The method of claim 4 further comprising:

10 utilizing the ~~programmable phase calibration device~~ calibration module to compensate the portion of the first signal to the second signal so that phase difference between the compensated second signal and the first signal becomes 90 degrees.

15 6. (cancelled)

7. (currently amended) An RF receiver comprising:

a first mixer and a second mixer for receiving RF signals and respectively generating a first signal and a second signal that are at about quadrature phase
20 angles; and

a [[phase]] calibration module coupled to at least one of the first mixer and the second mixer, for modifying the first signal by subtracting a portion of the first signal from the first signal, and combining the portion of the first signal with the second signal so as to make the phase difference of the first signal
25 and the second signal substantially equal to 90 degrees.

8. (cancelled)

9. (currently amended) The RF receiver of claim 7 wherein the [[phase]] calibration module further comprises a phase calibration device coupled between the first mixer and the second mixer.
- 5 10. (currently amended) The RF receiver of claim 7 further comprising an analog front end controller (AFE controller) coupled to and controlling the [[phase]] calibration module so as to make the phase difference of the first signal and the second signal substantially equal to 90 degrees.
- 10 11. (cancelled)
12. (currently amended) The RF receiver of claim 7 wherein the [[phase]] calibration module comprises a cross programmable gain amplifier (XPGA).
- 15 13. (previously presented) The RF receiver of claim 7 being applied in a GSM communications system or a WLAN communications system.
14. (currently amended) The RF receiver of claim 7 further comprising:
a complex filter, having input ports electrically connected to the [[phase]]
20 calibration module, for processing image cross talk caused by mismatch between the first signal and the second signal.
15. (cancelled)